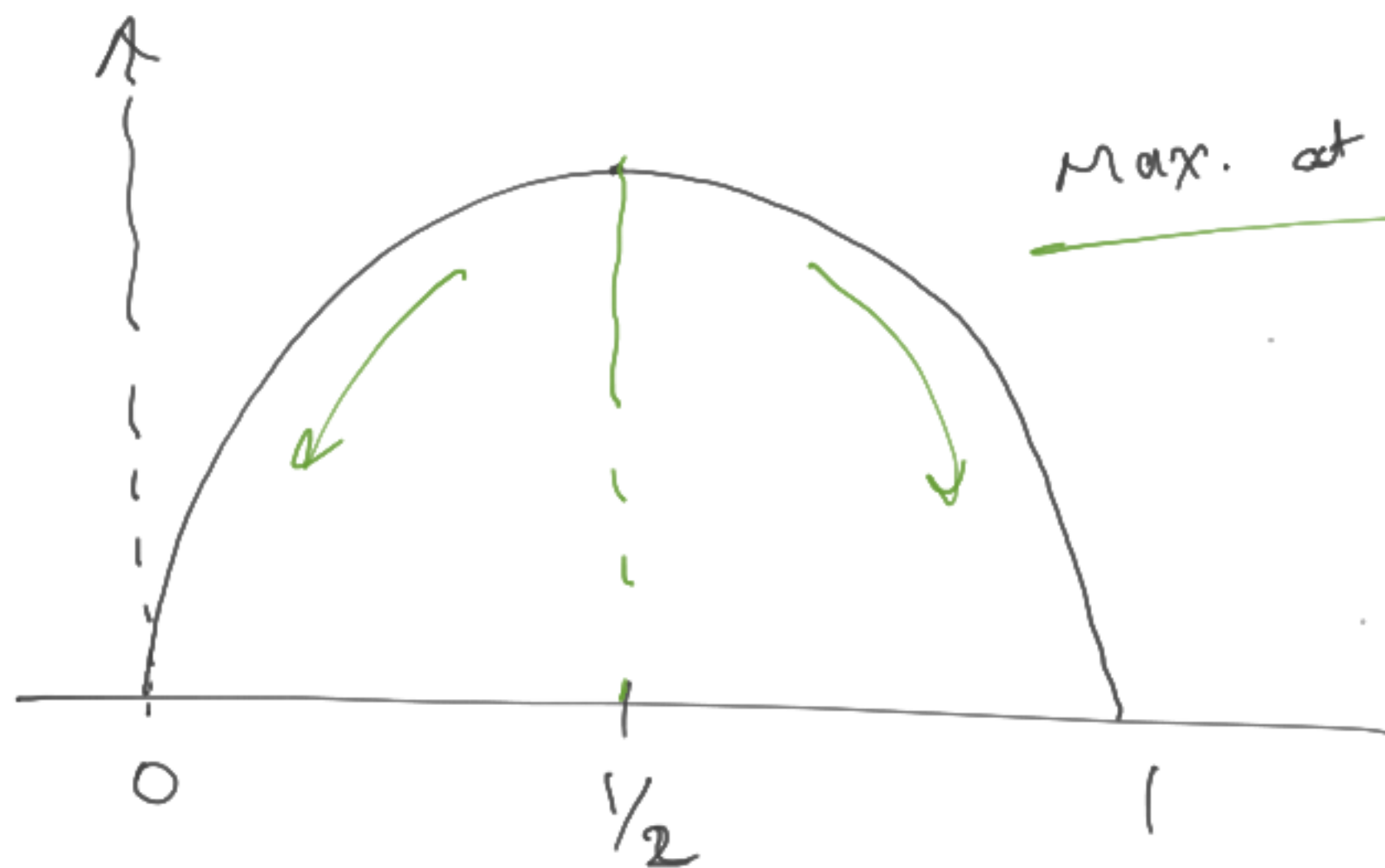


Binary R.V. Entropy: $p, 1-p$

$$H_2(p) = p \log \frac{1}{p} + (1-p) \log \frac{1}{1-p}$$



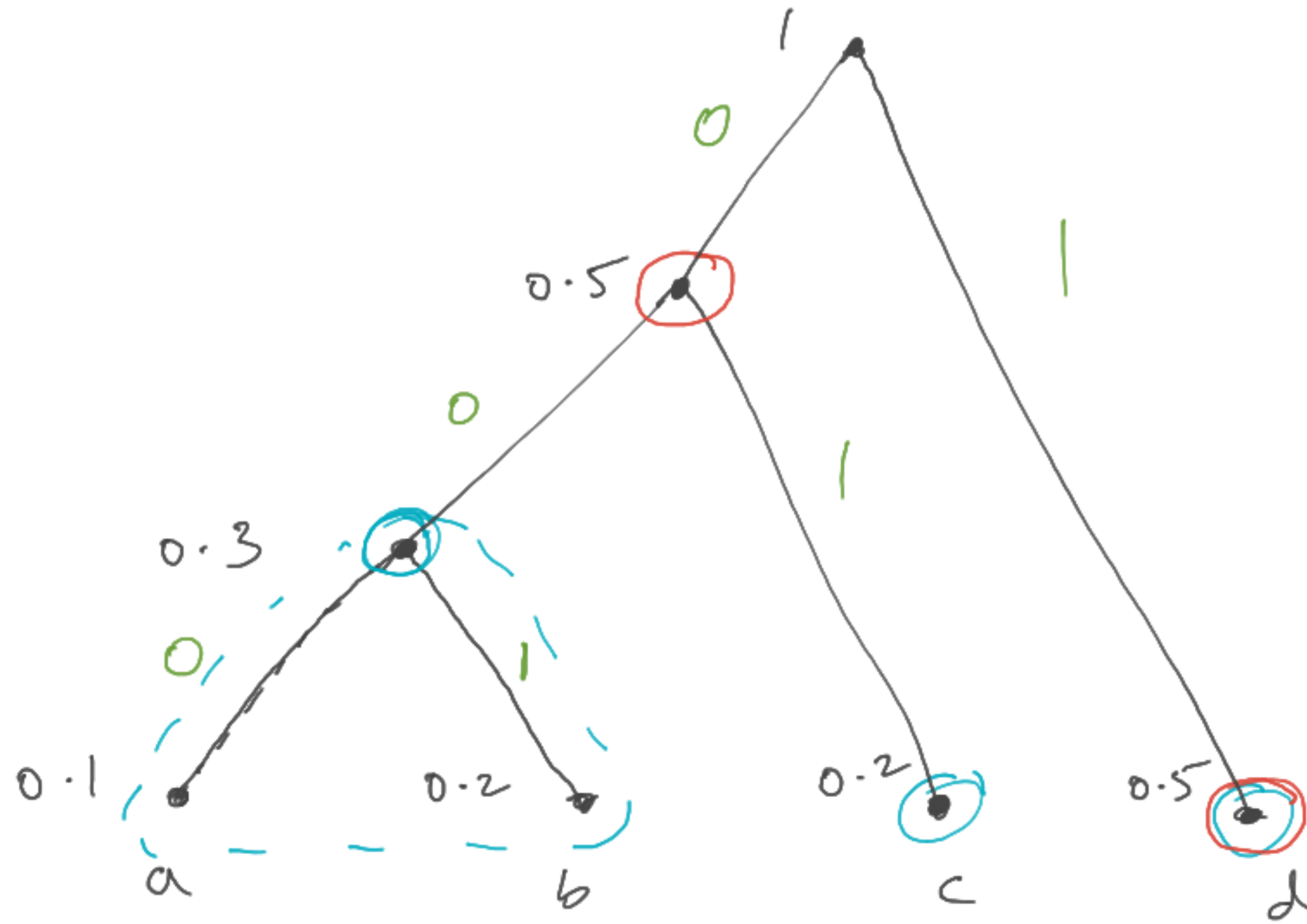
max. at equiprobable.

for $n > 2$ as well.

$S = \{a, b, c, d\}$

$p(a) = 0.1$ $p(b) = 0.2$ $p(c) = 0.2$
 $p(d) = 0.5$

Huffman encoding:



$a = 000$
 $b = 001$
 $c = 01$
 $d = 1$